

LA-UR-21-26601

Approved for public release; distribution is unlimited.

Commuting again to work on-site? Lab's first drivers faced their own challenges decades ago Title:

Author(s): Gundestrup, Noel

Intended for: Web

Issued: 2021-07-12



Commuting again to work on-site? Lab's first drivers faced their own challenges decades ago By Noel Gundestrup, Archivist, National Security Research Center

After a long pause in commuting, more and more Lab staff are filling travel mugs, topping off their tanks, and heading up the hill for on-site work. As long as the Lab has existed, workers have snaked through tight mountain roads to get to their jobs. And, back in the early 1940s, drivers faced even more challenges.

In the Lab's earliest years, drivers likely worried about getting stuck in the mud, navigating intense switchbacks, or making sure important equipment, such as a disassembled power plant, didn't fall off the back of the truck that was hauling it. Creative solutions could go a long way to get out of a jam.

As many of us return onsite and get reacquainted with commuting, we look back at how transportation has changed since the Manhattan Project, the U.S. government's top secret effort at Los Alamos to create the first atomic bombs to help end World War II. These stories and photos are part of the collections in the National Security Research Center, which is the Lab's classified library and also houses unclassified artifacts from our past.

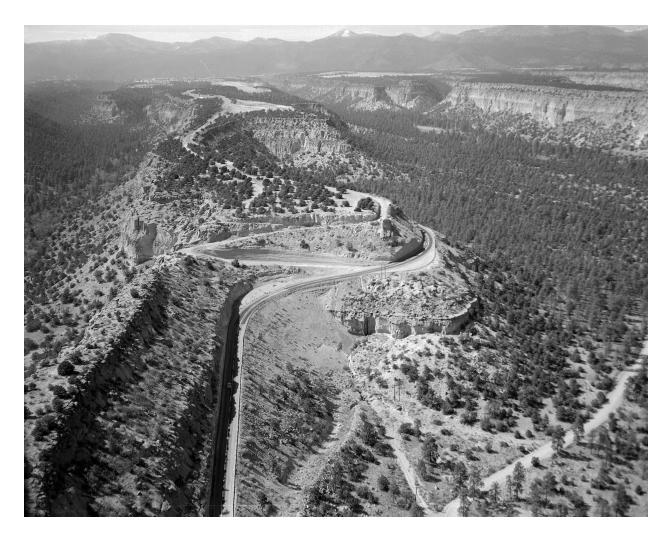
Power plant falls off the hill

Elmo Morgan, who was the coordinator for the construction of the Los Alamos Lab in the early 1940s, needed to meet the growing demand for electricity with an additional source of power.

An out-of-state generating power plant was disassembled, placed on a truck and taken on its journey up the hill. Early on, the roads were primitive with very severe switchbacks. During a turn, the load tipped and the power plant fell off the truck and down the hill, cracking the head of the cylinder block.

In an oral history interview, Morgan described what happened next:

"We're now in winter and Los Alamos is around 7,000 feet in elevation. It was on the slope and there was snow on the ground. One of the workers erected a tent on this steep slope to cover the damaged head of the cylinder block so they could weld it. They didn't dare move it, for fear it would crack even more — maybe break in two. We got it back up to the road and on the trucks, there to its final site."



https://drive.google.com/file/d/1s--I3u7aQofOVH6ilSCL1IXY7IUBiEzH/view?usp=sharing Caption: The road to Los Alamos had severe switchbacks that were challenging to navigate, especially for the large trucks hauling equipment to the Lab. This photo from 1955 is part of the collections in the National Security Research Center, the Lab's classified library.

Rough roads

Lt. Edward Wilder Jr. came to the Lab to work with explosives during the Manhattan Project. Many of the streets were unpaved and frequently muddy — the facilities and the town were hastily constructed after Los Alamos was chosen as the location for the secret lab.

In the book *Manhattan District History, Non Scientific Aspects of Los Alamos Project Y, 1942 through 1946*, Wilder recounted the time when Manhattan Project leader Gen. Leslie R. Groves went for a drive with George Kistiakowsky, who was head of the Explosives Division and wasn't happy with the state of roads.

"Most of the roads were gravel, some very rough. Once when Gen. Groves visited Los Alamos, Kistiakowsky took him to S Site (where explosives work was done) in a jeep that had the springs

made inoperative by wooden blocks under them. As a result of that trip, the roads over which HE (high explosives) was moved were improved."



https://drive.google.com/file/d/1aGT839Jgz5XGQTmdL10s8BkJBzEtDgsk/view?usp=sharing Caption: In the early years of the Lab, many of the roads were unpaved, as were streets in town.

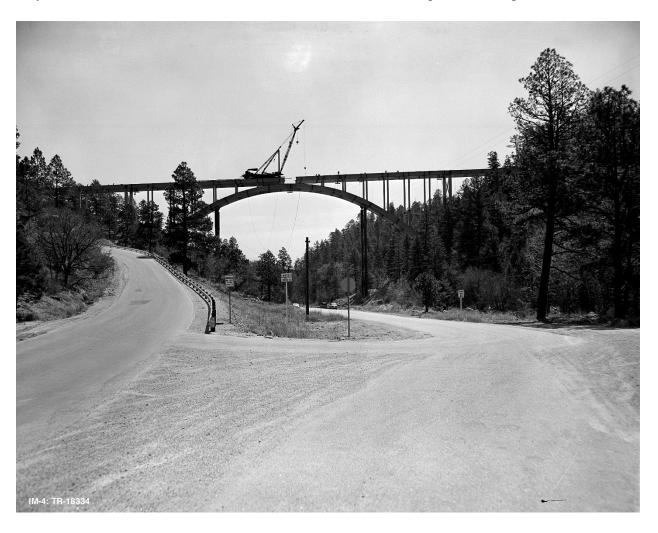
Omega Bridge (Los Alamos Canyon Bridge)

After the wartime mission ended with the detonation of the Fat Man and Little Boy weapons over Japan, the Lab's national security mission would continue and the development of more permanent infrastructure began. In the 1950s, the Lab's main technical area in downtown Los Alamos was relocated across a canyon to the mesa south of town. A new four-lane bridge was proposed, though permission had been given for only three lanes. Morgan recalled that with a little creativity, a solution was found:

"I remember distinctly coming back and telling Capt. Tyler what the decision was. And he used some pretty strong language that I can't repeat here ... (H)e said, 'We'll show the so-and so's. We'll build the three lanes. We'll make each of the lanes wide enough that we'll end up with four lanes, anyway.'

After it was built and people came out and looked to see what we had done, they learned about it then, but it was too late. They didn't say anything. ... (S)ome actually thanked us, unofficially of course."

The Omega Bridge is a steel-arch bridge that carries north- and south-bound traffic over the canyon between downtown Los Alamos and the Lab. It was completed on August 20, 1951.



https://drive.google.com/file/d/1EMvtG30HRPRbti41DFkBcuMs5iIKtEj7/view?usp=sharing Caption: The Omega Bridge, also called the Los Alamos Canyon Bridge, during construction in the 1950s.

Want to read more stories on the people and events that make up the Lab's history? Visit the <u>National Security Research Center</u>. Have feedback or need research assistance? Contact us at nsrc@lanl.gov.